

The Site Guide

Pipeline Road, Canal Zone

Location Caribbean slope of Panama Canal Zone.

Description Accessible but still relatively undisturbed lowland forest is rare in the neotropics. Under normal circumstances, the existence of a road soon results in the disappearance of much of an area's natural vegetation. The Canal Zone is, however, in striking contrast. It is still controlled by the United States government, which as part of its Canal defense policy has for years not allowed private individuals to settle within Zone limits. The result has been that much of the Canal Zone has remained in or reverted to woodland or forest. And the choice locality in the Zone for seeing a large variety of neotropical humid forest birds is along Pipeline Road; nearby Barro Colorado Island is much better known, but has much less variety as far as its avifauna is concerned.

The Pipeline Road cuts through an extensive area of primarily mature humid forest, located northwest of the town of Gamboa on the eastern side of Gatun Lake. The terrain is quite hilly, with elevations averaging 200-400 feet above sea level, with numerous small streams draining into the lake. In the more mature areas of forest (none is virgin), most of the trees rise 90-100 feet in height with occasional taller emergent trees. In such areas the canopy is essentially closed and the undergrowth relatively sparse; borders and small openings with dense vegetation are of frequent occurrence, however, and more closely approximate the popular conception of "jungle." The climate is uniformly hot and humid, with an average annual rainfall of about 105 in. (based on data compiled on Barro Colorado Island). Much of this rainfall occurs during the rainy season (April-December), mostly in the form of often torrential but usually brief showers. The dry season (January-March) is relatively short and not severe, with very few trees losing their leaves.

The Pipeline Road itself was constructed during World War II by the U.S. Navy, and is so named because it parallels a section of the trans-isthmian oil pipeline. Part gravel and part paved, the road is easily traversed by all vehicles, though some sections are quite steep. As the road dead-ends on a deserted arm of Gatun Lake, there is virtually no traffic. The area is still controlled by the U.S. military, but access is now normally unrestricted. Hunting, unfortunately, is permitted, but pressure is not heavy, and many of the larger birds and mammals still occur (see below).

Negotiations between Panama and the United States concerning the future status of the Canal Zone are still continuing. Whatever the outcome of those deliberations, it is certainly much-to-be-hoped that all or a major portion of the Pipeline Road area can be set aside as a forest reserve or park. As such, and if properly protected and developed, it could become a tourist attraction for Panama. For the present, it is without question the outstanding easily accessible lowland forest area in Panama, and probably in all of Middle America.

General information English is spoken widely in this part of Panama, and health and sanitary conditions are generally excellent. Any time of the year is good for birds, with the breeding period (peaking April-June) with its increased singing being perhaps best. The dry season has the most predictable weather, though conditions are often excellent (and usually not as hot) during the rainy season. As the climate is generally hot, very light weight clothing should be worn, long pants are advisable for both sexes. Flying biting insects (e.g., mosquitoes) are, surprisingly, not very numerous; chiggers and ticks, however, sometimes are, and against them the best defense is spraying one's legs and pants with an effective insect repellent. Poisonous snakes need not be feared by the birder (most are nocturnal and secretive), although one should, as elsewhere, remain alert to their presence in an area.

Access The nearest airport is Tocumen, Panama's international airport, located some 15 miles east of Panama City (on the Pacific coast). Rental cars are available at numerous places (best at the airport or the larger hotels); cars with drivers are also

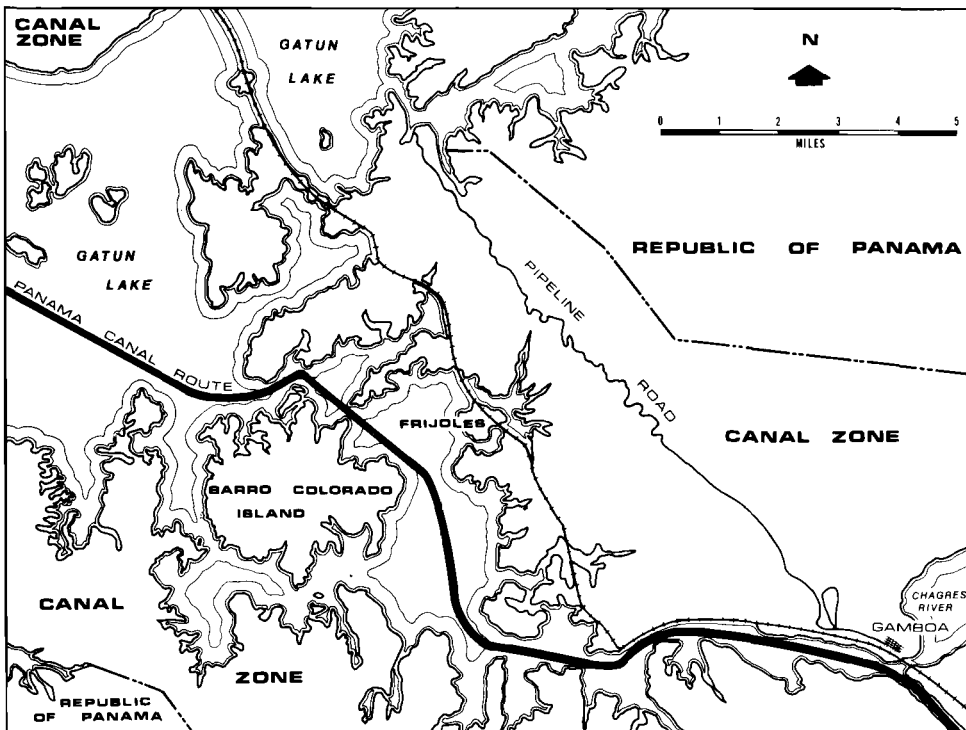
available. Drive into the Canal Zone and proceed north on the Gaillard Highway along the east side of the Canal. At Summit turn left toward Gamboa (continuing straight takes one into Madden Forest, another fine birding area), and continue on past Summit Gardens on the right (also a good birding spot, with an excellent botanical garden and a little zoo displaying many of the local birds and mammals). Proceed to Gamboa, crossing the Chagres River just before reaching the town. The drive from Panama City to Gamboa takes about 45 minutes. For subsequent directions, see below.

Accommodations Panama City has many hotels at varying price ranges (there are none in the Canal Zone). Camping is not advisable without prior tropical experience; although there are no developed facilities, primitive camping would be possible virtually anywhere along Pipeline Road itself. Excellent meals are available at the clubhouse of the Gamboa Golf Club overlooking the Chagres River (inquire in Gamboa for directions); snacks are obtainable at Summit Gardens on weekends. For greatest flexibility, it is perhaps best to bring a picnic lunch. Pur-

chase gasoline in Panama City, since you must have a permit (unobtainable by tourists) to do so in the Canal Zone.

Birding Continue straight through Gamboa. Once past the town, do not bear right on the paved road (which enters a military area), but rather bear left on a gravel road. After a short distance a marshy pond will be seen on the right. This pond is worth checking for various fresh water birds such as Wattled Jacanas, gallinules, Least Grebes, and Green and Ringed Kingfishers (as well as small caiman). The semi-open vicinity often has much activity, especially in the early morning, and species such as Yellow-tailed and Yellow-backed Orioles and Golden-masked and White-lined Tanagers may be seen, as well as a variety of other common species with which the observer will already be familiar if he has spent much time in Panama. The areas beyond are so good, however, that it is perhaps best not to "waste" too much time here, and proceed onward.

From this point you are on Pipeline Road. The road is about 15 miles in length, the most interesting sections being between





A view of the Pipeline Road. Photo / Robert S. Ridgely

about three and 12 miles out. Bear right at the one, and only, fork in the road, a few hundred yards from the marshy pond; the smaller road going straight leads to the small Chagres Air Field. The first three miles of the road pass through some good second-growth woodland; one should drive slowly along this stretch, listening carefully for the calls from a mixed species flock. Many smaller birds may be seen in the trees and tangled undergrowth (e.g. Plain Xenops, Fasciated Antshrike, Golden-collared Manakin, White-winged Becard, Black-tailed Flycatcher, Southern Bentbill, Black-bellied and Rufous-breasted Wrens, Long-billed Gnatwren, Red-legged and Green Honeycreepers, Blue Dacnis, Red-throated Ant-Tanager, Blue-black Grosbeak), while others will often be seen perched higher up (e.g. trogons, White-necked Puffbird, toucans and Collared Araçari, Black-cheeked Woodpecker, Masked Tityra, Purple-throated Fruitcrow). After about three miles the road opens up, a wide swath having here been cut through the forest, perfect for observing the early morning flights of four species of parrots (Brown-hooded, Blue-headed, Red-lored, and Mealy-macaws, unfortunately, were long ago extirpated from the Canal Zone area). About 3½ miles out, one comes to a side road leading to the right. Park and walk the short distance down to a stream which here passes

through a semi-open area but with much adjacent forest. A good selection of birds can usually be seen; watch for the bulky nest of a Cinnamon Becard, and also for Bay Wrens and Yellow-rumped Tanagers. White-thighed Swallows and *Chaetura* swifts (probably mostly Band-rumped) are often in evidence, a raptor or two may fly over or be found perched, and one is almost certain to hear several White-throated Crakes (seeing them is another matter!). Walking further up this stream is almost invariably rewarding.

Returning to the main road, continue for about 1½ miles until you pass a small gate (always open), and the road becomes paved. Listen carefully along this stretch and further on for the "churring" of antbirds at an army ant swarm; three species are faithful attendants in this part of Panama (Bicolored, Spotted, and Ocellated Antbirds), but the swarms are often a center of activity for many other birds as well (such as Plain-brown Woodcreeper, Chestnut-backed Antbird, Black-faced Anthrush, Gray-headed Tanager, and others). Where the road becomes paved, a dirt road angles off to the right; park here and walk down this road for a few hundred yards to the cabin of the Limbo Hunt Club, situated in a small clearing almost entirely surrounded by tall luxuriant forest. A pause in the clearing will likely produce a number of interesting species (e.g. Black-breasted Puffbird,

Keel-billed and Swainson's Toucans, Cinnamon Woodpecker, Black-crowned Tityra, Long-tailed Tyrant, White-ringed and Yellow-margined Flycatchers, Forest Elaenia, Fulvous-vented Euphonia). Entering the forest beyond on one of the several trails that cross the narrow stream should net even more. In addition to many typical forest interior birds (e.g. Ruddy Quail-Dove, Broad-billed and Rufous Motmots, White-whiskered Puffbird, Scaly-throated Leaf-tosser, Blue-crowned and Red-capped Manakins, Golden-crowned Spadebill, Brownish Flycatcher, Olivaceous Flatbill, Song and Nightingale Wrens, Tawny-faced Gnatwren, Slate-colored Grosbeak) which may be seen, some other exceptionally scarce and elusive species have been found here in recent years, most of them rare but all to be watched for, including: Tiny and Plumbeous Hawks, Tawny-faced Quail, Olive-backed Quail-Dove, Short-tailed Nighthawk, Crimson-bellied Woodpecker, Pgymy Antwren, Wing-banded Antbird, and Black-crowned Antpitta.

Fruiting trees will often attract a wealth of frugivorous birds, including the Blue Cotinga and oropendolas and caciques. Hummingbirds, on the other hand, are usually not very conspicuous along Pipeline Road, although hermits will be seen rather frequently, and occasionally numbers will gather around a flowering tree (often including two beautiful species, the White-necked Jacobin and Purple-crowned Fairy). Gamebirds persist in fair numbers, though all are shy and difficult to see; the Great Tinamou's beautiful tremulous call is readily heard in the early morning, while it is gratifying to know that a few Great Curassows apparently manage to survive in the area, even if one does not have the good fortune to see one (Crested Guans, curiously, seem not to have been reported, although they remain on Barro Colorado Island). An excellent variety of birds will inevitably be seen on this part of Pipeline Road. The one difficulty is that trails *into* the forest are to my knowledge non-existent. To enter the forest, one must wade up or down one of the many small shallow shady streams, an often very productive method of seeing birds of the forest interior, and the only way one is at all likely to see a Sunbittern or Chestnut-bellied Heron (both rare and hardly to be counted on, but present).



One of the streams in the area. Photo / Robert S. Ridgely

The Pipeline Road beyond Limbo Hunt Club should also be covered if possible (at least two days are needed to do justice to the entire Pipeline area). For about 7 miles it winds through superb humid forest. In the early morning birds of prey often perch conspicuously at the top of large trees, including species such as Gray-headed, Hook-billed, and Double-toothed Kites, and White and Semiplumbeous Hawks; as the morning progresses some of these and several others may begin to soar (then watch also for King Vulture, Swallow-tailed and Plumbeous Kites, and Ornate and Black Hawk-Eagles). One will almost invariably encounter numerous flocks of smaller birds. Some will be "dominated" (at least in the numerical sense) by three species of antwrens (White-flanked, Checker-throated, and Dot-winged), and will forage mostly at lower and middle levels; with them will likely be a number of other species (manakins, various flycatchers, Lesser Greenlet, etc.), and perhaps specialties such as Buff-throated Foliage-gleaner, Russet Antshrike, Spotted-crowned Antwren, and Broad-billed Manakin. In the tanager and honeycreeper "dominated" flocks of upper levels and the canopy, one can regularly see such species as the Sirystes, Green Shrike-Vireo, Shining Honeycreeper, Scarlet-thighed Dacnis, White-vented Euphonia, and Bay-headed and Sulphur-rumped Tanagers, among many others. Several other species of tanagers habitually forage in groups made up of only their own species; these include the Carmiol's and Tawny-crested Tanagers (sometimes associated) and the Dusky-faced Tanager (usually along streams).

Recognition of vocalizations is of crucial importance in tropical forests (even more important than elsewhere), for vegetation is dense and many birds are difficult to see clearly; obviously birders with little or no tropical experience will record fewer species. It should be understood that nowhere near all the species listed can be expected on any one particular day. One of the most notable features of tropical forest birding is that on subsequent visits to the same area, one is almost assured of seeing a number of species not encountered on previous trips (up to a point, of course). An experienced individual can record 150 species in a day on Pipeline Road (except during the northern summer months when the northern migrants are absent), and many additional species can be found quickly in nearby water or more open habitats. Perhaps the most important key to success, for beginner and experienced hand alike, is to be in the field as close to dawn as possible. The tropical mid-day is just too hot for much activity, be it avian or human, and one will attain much more satisfactory and comfortable results if he endures the slight inconvenience of arising a few hours earlier.

The following is a list of most of the species which have been recorded from Pipeline Road beyond the marshy pond near



Spectacled Owl

Gamboa; most waterbirds and all northern migrants have been omitted. Names used are those of Eisenmann (*The Species of Middle American Birds*, Linnaean Society of New York 7: 1-120, 1955), with a few modifications as indicated. A number of rare species are mentioned (denoted with an "r"), and will be seen only by the fortunate or the persistent. Species which should be seen on most days on Pipeline Road are indicated with an "c." Others which are much more likely to be heard than seen are marked with an "hd".

Great Tinamou (hd)
 Little Tinamou (hd)
 Chestnut-bellied Heron (r)
 King Vulture
 Black Vulture (c)
 Turkey Vulture (c)
 Swallow-tailed Kite (c, Jan-Aug)
 Gray-headed Kite
 Hook-billed Kite
 Double-toothed Kite (c)
 Plumbeous Kite (c, Feb-Sept)
 Tiny Hawk (r)
 Short-tailed Hawk
 Gray Hawk
 White Hawk (c)
 Semiplumbeous Hawk
 Plumbeous Hawk (r)
 Ornate Hawk-Eagle
 Black Hawk-Eagle (c)
 Collared Forest-Falcon
 Slaty-backed Forest-Falcon (r)
 Barred Forest-Falcon (r)
 Great Curassow (r)
 Gray-headed (Chestnut-winged)
 Chachalaca
 Marbled Wood-Quail (r)
 Tawny-faced Quail (r)

Gray-necked Wood-Rail
 White-throated Crake (hd)
 Sunbittern (r)
 Pale-vented Pigeon
 Scaled Pigeon (c)
 Short-billed Pigeon (c)
 Ruddy Ground-Dove (c)
 Blue Ground-Dove
 White-tipped (White-fronted)
 Dove (c)
 Gray-chested Dove
 Olive-backed Quail-Dove (r)
 Ruddy Quail-Dove
 Orange-chinned Parakeet (c)
 Brown-hooded Parrot
 Blue-headed Parrot (c)
 Red-lore Parrot (c)
 Mealy Parrot
 Smooth-billed Ani
 Squirrel Cuckoo (c)
 Pheasant Cuckoo (hd)
 Crested Owl (r)
 Spectacled Owl (hd)
 Mottled Owl (hd)
 Oil Bird (r)
 Great Potoo (r, hd)
 Common Potoo (hd)

Short-tailed (Semicollared) Night-hawk
 Pauraque (hd)
 White-collared Swift
 Band-rumped Swift
 Lesser Swallow-tailed Swift
 Rufous-breasted Hermit
 Band-tailed Barbthroat
 Long-tailed Hermit (c)
 Little Hermit (c)
 White-necked Jacobin
 Violet-headed Hummingbird (r)
 Crowned Woodnymph
 Violet-bellied Hummingbird
 Blue-chested Hummingbird
 Snowy-breasted Hummingbird
 Rufous-tailed Hummingbird (c)
 Purple-crowned Fairy
 Slaty-tailed Trogon (c)
 White-tailed Trogon
 Black-throated Trogon (c)
 Violaceous Trogon (c)
 Pgymy Kingfisher (r)
 Broad-billed Motmot
 Rufous Motmot (c)
 Blue-crowned Motmot
 Great Jacamar (r)

White-necked Puffbird (c)	Golden-collared Manakin (c)	Nightingale Wren (hd)
Black-breasted Puffbird	Thrush-like Manakin (hd)	Clay-colored Robin (c)
Pied Puffbird	Broad-billed Manakin (r)	Tropical Gnatcatcher (c)
White-whiskered Puffbird	Blue Cotinga	Long-billed Gnatwren
Collared Araçari (c)	Bright-rumped Attila	Tawny-faced (Half-collared) Gnatwren
Keel-billed Toucan (c)	Speckled Mourner (r)	Green Shrike-Vireo (c, hd)
Swainson's (Chestnut-mandibled) Toucan (c)	Rufous Mourner	Yellow-green Vireo (c, Jan-Sept)
Cinnamon Woodpecker (hd)	Rufous Piha	Lesser (Gray-headed) Greenlet (c)
Lineated Woodpecker	Cinnamon Becard	Bananaquit
Black-cheeked Woodpecker (c)	White-winged Becard	Red-legged Honeycreeper (c)
Red-crowned Woodpecker (c)	Masked Tityra (c)	Shining Honeycreeper (c)
Crimson-crested Woodpecker	Black-crowned Tityra	Green Honeycreeper (c)
Crimson-bellied Woodpecker (r)	Purple-throated Fruitcrow (c)	Blue Dacnis (c)
Plain-brown Woodcreeper	Sirystes	Scarlet-thighed Dacnis (c)
Ruddy Woodcreeper (r)	Long-tailed Tyrant (c)	Chestnut-capped Warbler
Long-tailed Woodcreeper	Tropical Kingbird (c)	Chestnut-headed Oropendola (c)
Wedge-billed Woodcreeper (c)	Piratic Flycatcher (c, Jan-Sept)	Yellow-rumped Cacique (c)
Barred Woodcreeper (r)	Streaked Flycatcher	Scarlet-rumped Cacique (c)
Buff-throated Woodcreeper (c)	Boat-billed Flycatcher (c)	Yellow-backed Oriole (c)
Black-striped Woodcreeper (c)	White-ringed Flycatcher	Yellow-tailed Oriole
Buff-throated Foliage-gleaner	Social Flycatcher (c)	White-vented Euphonia
Plain Xenops (c)	Dusky-capped (Olivaceous) Flycatcher (c)	Yellow-crowned Euphonia
Tawny-throated Leaf-tosser (Leaf-scraper) (r)	Ruddy-tailed Flycatcher (c)	Fulvous-vented Euphonia (c)
Scaly-throated Leaf-tosser (Leaf-scraper)	Sulphur-rumped Flycatcher	Thick-billed Euphonia (c)
Fasciated Antshrike	Black-tailed Flycatcher	Golden-masked Tanager (c)
Great Antshrike	Northern Royal-Flycatcher	Plain-colored Tanager (c)
Barred Antshrike	Golden-crowned Spadebill	Bay-headed Tanager (c)
Slaty Antshrike (c)	Brownish Flycatcher	Blue-gray Tanager (c)
Russet Antshrike	Yellow-margined Flycatcher (c)	Palm Tanager
Spot-crowned Antvireo	Olivaceous Flatbill	Crimson-backed Tanager (c)
Pygmy Antwren (r)	Southern Bentbill (c)	Yellow-rumped Tanager
White-flanked Antwren (c)	Black-capped Pygmy-Tyrant (r)	Carmioli's (Olive) Tanager
Checker-throated (Fulvous-bellied) Antwren (c)	Yellow-green Tyrannulet (r)	Red-throated (Dusky-Tailed) Ant-tanager
Dot-winged Antwren (c)	Yellow-bellied Elaenia (c)	White-shouldered Tanager (c)
Dusky Antbird (c)	Forest Elaenia (hd)	Tawny-crested Tanager (c)
Chestnut-backed Antbird (c)	Paltry Tyrannulet (c)	Sulphur-rumped Tanager
Dull-mantled Antbird (r)	Yellow-crowned Tyrannulet (c)	Gray-headed Tanager
Bicolored Antbird	Brown-capped Tyrannulet	Dusky-faced Tanager (c)
Spotted Antbird (c)	Olive-striped Flycatcher	Buff-throated Saltator (c)
Ocellated Antbird (Antthrush)	Ochre-bellied Flycatcher (c)	Streaked Saltator (c)
Wing-banded Antbird (Antthrush) (r)	Gray-breasted Martin (c)	Slate-colored Grosbeak
Black-faced Antthrush (hd)	White-thighed Swallow	Blue-black Grosbeak (c)
Black-crowned Antpitta (r)	Plain Wren	Blue-black Grassquit (c)
Streak-chested Antpitta (hd)	Bay Wren	Variable Seedeater (c)
Blue-crowned Manakin	Black-bellied Wren	Orange-billed Sparrow
Red-capped Manakin (c)	Rufous-breasted Wren	Black-striped (Green-backed) Sparrow.
	White-breasted Wood-Wren	
	Song Wren (c)	

Several species of larger mammals may also be seen, though, because hunting is permitted in the area, most are less numerous and shyer than on Barro Colorado Island (where all are protected). White-faced and Black Howler Monkeys, Three-toed Sloth, Coatimundi, and Agouti can be seen rather often, while Geoffroy's Marmoset, *Tamandua* anteater, Tayra, Jaguarundi and Forest Rabbit are encountered less frequently. Others likely still occur but are rarely seen, either because they are strictly nocturnal (*e.g.* Ocelot,

Paca), or because they have been largely shot out (*e.g.* Collared Peccary, White-tailed and Brocket Deer).

Rating ★★★★★ at all seasons.

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The author would appreciate hearing of any observations, past or future, which are much at variance with the foregoing.